

| Fire Dampers | | Circular | | | | Rectangular | | | | Control Systems |
|--|--|---|---|--|---|--|--|--|--|-----------------|
| CE | FDMR  | FDMA-PM  | CFDM  | CFDM-V  | FDMB  | FDMQ  | FDMA  | | | |
| Size | | | | | | | | | | |
| Dimensions | 100-800 | 900 & 1000 | 100-200 | 100-200 | 100x100 - 1000x500 - 0.5m2 | 150x150 - 1500x800 | 180x180 - 1600x1000 | | | |
| Non-Standard Sizing | x | x | x | x | ✓ | ✓ | ✓ | | | |
| Fire Resistance Classification | | | | | | | | | | |
| Classification Standard BS EN 13501-3 | | | | | | | | | | |
| Product Standard BS EN 15650 | EI 120 (Ve-Ho i<->) S (500Pa) | EI 120 (Ve-Ho i<->) S | EI 120 (Ve-Ho i<->) S | EI 120 (Ve-Ho i<->) S | EI 120 (Ve-Ho i<->) S (500Pa) | EI 120 (Ve-Ho i<->) S | EI 120 (Ve-Ho i<->) S | | | |
| Fire Test Standard BS EN 1366-2 | | | | | | | | | | |
| Installation Method | | | | | | | | | | |
| Wall (Ve) - Concrete, Masonry or Lightweight Construction | ✓ 60/90/120 M | ✓ 120M | ✓ | ✓ | ✓ 30/60/90/120 M | ✓ 60/90/120 M | ✓ 90/120 M | | | |
| Wall thickness (minimum) - solid/flexible wall construction | 100mm | 100mm | 100mm | 100mm | 100mm | 100mm | 100mm | | | |
| Ceiling/floor (ho) - Concrete or Masonry | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| Wall thickness (minimum) - Ceiling/floor Concrete/aerated concrete | 110mm/125mm | 110mm/125mm | 110mm/125mm | 110mm/125mm | 110mm/125mm | 110mm/125mm | 110mm/125mm | | | |
| Away from the Wall (Ve) - Concrete, Masonry or Lightweight | ✓ 90M | ✓ 90M | x | x | ✓ 90/120 M | ✓ 90/120 M | ✓ 90 M | | | |
| Away from the Ceiling/Floor (ho) - Concrete or Masonry | ✓ 90M | ✓ 90M | x | x | ✓ 90M | ✓ 90M | ✓ 90M | | | |
| British Gypsum EN Shaftwall (ask for others types) | x | x | x | x | ✓ 60M/90 M | ✓ 120 M | x | | | |
| Sandwich Panel Installation (whitewall) | ✓ 90M | x | x | x | x | x | x | | | |
| Damper rotation possible (dampers are not handed) | ✓ 90M | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| "Battery" Installation (multiple dampers) wall only | ✓ | x | x | x | ✓ 90 M | ✓ 90 M | x | | | |
| Actuators (Spring Return) | | | | | | | | | | |
| Belimo 24V (.50) or 230V (.40) Drive Open/ Spring Close | ✓ | ✓ | x | x | ✓ | ✓ | ✓ | | | |
| Gruner 24V (.50) or 230V (.40) Drive Open/ Spring Close | ✓ | ✓ | x | x | ✓ | ✓ | ✓ | | | |
| Mechanical Spring Release (0.1) - Failsafe fusible link | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| Accessories | | | | | | | | | | |
| Limit Switch/s for Mechanical Spring Release | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| Material Options | | | | | | | | | | |
| Galvanised Steel | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| Powder Coating - Paint | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| Stainless Steel (AISI 316L) C4 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| Promat Impregnations for damp/aggressive environments | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| Smoke Control Dampers | | | | | | | | | | |
| CE | SEDS-R  | MSD-R  | SEDM-L  | SEDS-L  | MSD-S  | SEDM  | SEDS  | | | |
| Size | | | | | | | | | | |
| Dimensions | 100-630 | 200-630 | 200x430 - 1200x2030 | 200x200 - 1200x1200 | 160x180 - 1500x800 | 180x180 - 1600x1000 | 180x180 - 1600x1000 | | | |
| Non-Standard Sizing | x | x | x | Y (width only) | ✓ | ✓ | Y (width only) | | | |
| Fire Resistance Classification | | | | | | | | | | |
| Classification Standard BS EN 13501-4 | | | | | | | | | | |
| Product Standard BS EN 12101-8 | E600 120 (Ved-i<->) S 1500 Cmod MA Single | EI 120 (Vew-How-i<->) S 1500C 10000 AA Multi | EI 120 (ved,vew, i<->) S 1000 Cmod HOT 400/30 AA/MA Multi | E600 120 (Ve i<->) S 1500 Cmod MA Single | EI 120 (Ved-Hod-Vew-How i<->) S 1500 Cmod HOT 400/30 AA Multi | EI 120 (ved,vew,hod, How, i<->) S1500 Cmod HOT 400/30 AA/MA Multi | E600 90 (Ved-i<->) S 1000 C300 AA Single | | | |
| Fire Test Standard BS EN 1366-10 | | | | | | | | | | |
| Installation Method | | | | | | | | | | |
| Horizontal Duct (Ved) | ✓ | x | ✓ 90/120 M | ✓ | ✓ 90/120 M | ✓ 90/120 M | ✓ | | | |
| Vertical Duct (Hod) | x | x | x | x | ✓ 90/120 M | ✓ 90/120 M | x | | | |
| Wall (Vew) - Concrete, Masonry or Lightweight Construction | x | ✓ | ✓ 90/120 M | x | ✓ | ✓ | x | | | |
| Wall thickness (minimum) - solid | N/A | 100mm | 100mm | N/A | 100mm | 100mm | N/A | | | |
| Wall thickness (minimum) - flexible wall construction | N/A | 125mm | 100mm | N/A | 125mm | 100mm | N/A | | | |
| Ceiling/floor (ho) - Concrete or Masonry | x | ✓ | x | x | ✓ | ✓ | x | | | |
| Wall thickness (minimum) - ceiling/floor concrete/aerated concrete | N/A | 150mm | x | N/A | 150mm | 150mm/125 (EIS120) | N/A | | | |
| Damper rotation possible (dampers are not handed) | ✓ | ✓ | 180° | x | ✓ | ✓ | ✓ | | | |
| Battery Installation (multiple dampers) wall only | x | x | ✓ | x | x | ✓ | x | | | |
| Compartment Applications | | | | | | | | | | |
| Single Compartment | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| Multi-Compartment | x | ✓ | ✓ | x | ✓ | ✓ | x | | | |
| Activation System | | | | | | | | | | |
| Automatically Activated (AA) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| Manually Activated (MA) | ✓ | x | ✓ | ✓ | x | ✓ | ✓ | | | |
| Actuators (without Spring Return or Fuse) | | | | | | | | | | |
| Belimo 24V (.54) or 230V (.44) Drive Open/ Drive Closed | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| Belimo BEN 24 SR and BEE 24 SR .0-10V Modulating Control | ✓ | x | ✓ | ✓ | ✓ | ✓ | x | | | |
| Schischek InMax (larger Sizes Only) | x | x | x | x | ✓ | ✓ | x | | | |
| Material Options | | | | | | | | | | |
| Galvanised Steel | ✓ | ✓ | x | x | ✓ | ✓ | ✓ | | | |
| Calcium Silicate Board | x | x | ✓ | ✓ | x | ✓ | x | | | |
| Powder Coating - Paint | ✓ | ✓ | x | x | ✓ | x | ✓ | | | |
| Stainless Steel (AISI 316L) C4 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| Promat Impregnations for damp/aggressive environments | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| Notes: | Classifications shown are the best possible scenario - exact classification depends on wall type, installation and fire stopping method Extended leads are not possible for Smoke Control Dampers All options or permutations are not provided here - please contact us for more detailed requirements Cmod tested Smoke control dampers can provide a 3rd / balanced position from the control system The overall system design needs to take into account that some dampers are single bladed units, so very low or close tolerance airflow is not always possible. All lightweight walls must be symmetrical as to BS EN 1363-1 and Tested to BS EN 1364-1 | | | | | | | | | |

Mandik can supply a whole range of standard and bespoke control systems to compliment our range of Fire and Smoke control dampers, from simple hard wired panels through to fully Compliant BS ISO 21927-9 panels, complete with fire rated & tested interfaces specifically for EN12101-8 Smoke control dampers.

Mandik Mechanical Electrical (MME)
 Simple relay driven Mechanical/Electrical hard-wired panel with LED status indication.

Mandik Easy Addressable (MEA) Simple Addressable Bi-Directional networked panel for simple cause & effects and LED status indication.

Mandik Advanced Addressable (MAA)
 Advanced Addressable Bi-Directional networked panel with LED status indication, unlimited cause and effect and programmable features.

Mandik Touch Screen (MTS)
 Advanced PLC Advanced Addressable Bi-Directional networked panel with touch screen display, unlimited cause and effect and visual programmable features typically, menu driven building layouts.
 Mandik through our partner Blue River can design, supply, commission and maintain Fire and Smoke control dampers and controls offering a full System solution from one manufacturer.